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10/785,189	02/25/2004	Thanh Vinh Vuong	16813-13US	7413

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RESEARCH IN MOTION  
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EXAMINER
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COLUCCI, MICHAEL C

ART UNIT	PAPER NUMBER
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2626

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/785,189	<b>Applicant(s)</b> VUONG, THANH VINH	
	<b>Examiner</b> MICHAEL C. COLUCCI	<b>Art Unit</b> 2626	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5-9,12,15,16 and 20-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-9,12,15,16 and 20-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

### **DETAILED ACTION**

**NOTE:** Examiner acknowledges the cancellation of claims 2-4, 10, 11, 13, 14, and 17-19.

### ***Response to Arguments***

1. Applicant's arguments filed 07/08/2008 have been fully considered but they are not persuasive.

#### **Argument 1 (page 4 paragraph 1):**

- “Therefore, it cannot be fairly suggested that the cited portion of Lin teaches or suggests a method of translating a portion of a text-based communication to be transmitted from a wireless communications device, as presently claimed.”

#### **Argument 2 (page 4 paragraph 4):**

- “This is in direct contrast to the claimed subject matter, which recites sending a translation request, the translation request configured for reception by a translation service means and comprising the text to be translated”

#### **Response to arguments 1 and 2:**

Examiner maintains the position that Lin teaches a method of translating a portion of a text-based communication to be transmitted from a wireless communications device. Based on the claims invention, it is clear that Lin alone demonstrates a direct teaching of the present invention, wherein Lin teaches

translation of text in a wireless environment. Further, Lin goes as far as to teach voice to text, wherein voice is converted to text, text is translated into a second language, and the second text language is converted back to voice. Through the use of voice to text, a text based approach (as claimed in the present invention) is necessary to translate text AND voice into another language, wherein a text based approach allows a user to use a PDA or other portable devices. Lin demonstrates this procedure in a wireless environment and through the use of a wireless device such as a cellular phone.

**Previously cited:** Lin teaches a wireless network comprising a server side (e.g., WAP-based) and a client side (e.g., cellular phones, or other PDA wireless devices, such as Palm PC, Pocket PC, PSION, etc.), for user-directed acquisition of real-time translation and reference services (including voice-to-text, voice-to-voice, text-to-voice and text-to-text translations and reference services) in both text and voice, using standard cellular phones and PDA devices. Preferably, this embodiment is implemented as part of a wireless subscription service for end users by wireless service providers. Preferably, communication proceeds between a "master" user, having a subscribing wireless device (e.g., phone), and a "slave" user, having either a plug-in headset connected to the master device, or having another wireless device accessible by the master device. Preferably the system is implemented using a plurality of "slave" devices, in connection with one or more master "devices" receiving messages in one or more translated

languages. Preferably, master users may retrieve information related to selected voice or text, where such related information comprises high quality multi-lingual translations, explanations, illustrations and/or consolidated automatic multi-dictionary definitions ("look-ups"), and wherein such information is displayed to the user in text, voice, image or multi-media formats that are compatible with the user's wireless device, and with the user's native language or character set (Lin Col. 5 line 55 – Col. 6 line 15).

Furthermore, the present invention, like Lin, demonstrates the use of a wireless web server that communicates over the internet, relaying information (Present invention [0035] – [0038]).

Lin teaches various ways in which the present invention can be implemented--in this case, an apparatus and integrated method for user-directed acquisition of information relating to user-selected text of World Wide Web ("WEB") site pages, and an apparatus and integrated method, over a wireless network comprising a server side (e.g., a WAP-based server) and a client side (e.g., cellular phones, or other PDA wireless devices), for user-directed acquisition of real-time translation and reference services. The invention is particularly useful in those instances where the language and character-set of the Web site differ from the native language and character set of the user (Lin Col. 8 lines 20-33).

Though the invention of Lin demonstrates the use of web pages, the concept of text based communication via a wireless device is in direct relation to the claimed subject matter. Relative to the claim language, in order to verify that a portion of text is to be translated, it is necessary that a translation system continually monitor input, wherein by "sending" the desired translation request, a transmission of data will be communicated separate from the translated text itself (i.e. in a parallel example where terminal and non-terminal words will be present in the execution of software code). As demonstrated, Lin teaches communication with several users through the use of wireless devices for the purposes of translation (Fig. 8 and Fig. 9). The cited art of Lin teaches a user friendly and versatile method of the present invention, that is further capable of utilizing any combination of voice and text language translation for a plurality of users in a wireless network, wherein users can send their translation requests merely by transmitting the desired text and the system will monitor the text continually waiting for a trigger.

**Argument 3 (page 6 paragraph 2):**

- “The symbols discussed by Kugimiya are not trigger symbols indicating which text to translate, as claimed”

**Response to arguments 1 and 2:**

Additionally, Kugimiya has been introduced to further strengthen the teaching of Lin, wherein Kugimiya teaches the use of a keyboard as well as symbols used in the field of multilingual translation, wherein a keyboard is a type of means to fulfill a prompt to input a desired translated text. As claimed, “determining which text of the text-based communication is to be translated” is directly taught by Lin in view of Kugimiya. Though, Kugimiya teaches the detection of prepositional or indefinite phrases, these types of input are considered text regardless, wherein users will not always send complete text/voice sentences wirelessly through cellular phones or other wireless means.

Kugimiya teaches the translating apparatus of the present invention includes the syntactic decision means which decides from the construction of the inputted sentence whether or not a relative clause of nonrestrictive use or a prepositional or indefinite phrase for modifying a verb accompanied by a comma located immediately before the phrase exists and the symbol generating means which generates in the translated sentence, the first and second symbols indicative of the start position and the end position of the relative clause or the prepositional or indefinite phrase when the relative clause or the prepositional or indefinite phrase exists (Kugimiya Col. 5 lines 50-63).

To further strengthen the teachings of Lin, Kugimiya teaches a translating apparatus according to one embodiment of the present invention. The

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translating apparatus includes a main CPU (central processing unit) 1, a main memory 2, a CRT (cathode ray tube) 3, a keyboard 4, a translation module 5 and a memory 6 for storing a dictionary, grammatical rules, tree structure conversion rules, etc. for translation. The translation module 5 translates an inputted source language into a target language so as to output the target language. Namely, the source language inputted from the keyboard 4 is fed to the translation module 5 under control of the main CPU 1. As will be described in detail later, the translation module 5 translates the inputted source language into the target language by using the dictionary, the grammatical rules, the tree structure conversion rules, etc. stored in the memory 6. The translated result is not only temporarily stored in the main memory 2 but displayed by the CRT 3 (Kugimiya Col. 3 lines 1-17 & Fig. 11).

The combination of Lin in view of Kugimiya clearly demonstrates the present invention, particularly specific limitations such as the use of trigger symbols. Kugimiya teaches input text surrounded by quotations, wherein a user can input text through the use of a keyboard or other buttons. When translation initiates, only the enclosed "translation" will be sent as a translation, wherein a user has the option to include text that he/she wishes not to be translated (Kugimiya Fig. 11). The quotations are functionally equivalent and equally effective to a general "trigger symbol" recited in the present invention, wherein input text for translation

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is monitored relative to a trigger symbol, so that a system knows which text to translate.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 7-9, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin; Carol et al. US 6999916 B2 (hereinafter Lin) in view of Kugimiya; Shuzo et al. US 5023786 A (hereinafter Kugimiya).

Re claims 1, 9, and 12, Lin teaches in a wireless communications device enabled for communication in a wireless communications network, a method of translating a portion of a text-based communication to be transmitted from the wireless device (Col. 5 lines 55 – Col. 6 line 15), comprising:

sending a translation request, the translation request configured for reception by a translation service means and comprising the text to be translated (Col. 8 lines 5-15 & Fig. 9);

receiving and associatively storing with the indicated text a translation thereof, from a first language to a second language (Col. 7 lines 26-39 & fig. 7A);

sending the text-based communication after a response has been received for each prompt (Col. 5 lines 55 – Col. 6 line 15).

determining which text of the text-based communication is to be translated by continually monitoring the text-based communication for the presence of a trigger symbol,

However, Lin fails to teach the trigger symbol indicating which text to translate (Kugimiya Col. 5 lines 51-64 & Fig. 11);

stopping the continual monitoring of the text-based communication upon detecting an indication that the text-based communication is to be sent (Kugimiya Col. 5 lines 51-64 & Fig. 11);

providing one or more prompts, such that there is one prompt corresponding to each previously translated text and further where each prompt comprises the corresponding translation (Kugimiya Col. 4 lines 11-40);

Kugimiya teaches that initially, the originally read English sentence is stored in the buffer A as shown in FIG. 5. Under control of the translation CPU 15 based on the translation program 16, necessary grammatical data of each of the words of the sentence are obtained by the dictionary look-up and morphological analysis portion 11 in accordance with the original English sentence stored in the buffer A, by using the dictionary of memory 6, and are stored in the buffer B. For example, data on parts of speech of the words of the original English sentence are stored as shown in FIG. 6. The word "this" acts as a plurality of parts of speech, i.e. pronoun and demonstrative pronoun. The word "this" is determined as pronoun by the syntactic analysis portion 12.

In the syntactic analysis portion 12, a structural analysis tree indicative of modificatory relations among the words of the original English sentence is determined in accordance with the dictionary and the grammatical rules of the memory 6 as shown in FIG. 7.

Further Kugimiya teaches a translating apparatus of the present invention includes the syntactic decision means which decides from the construction of the inputted sentence whether or not a relative clause of nonrestrictive use or a prepositional or indefinite phrase for modifying a verb accompanied by a comma located immediately before the phrase exists and the symbol generating means which generates in the translated sentence, the first and second symbols indicative of the start position and the end position of the relative clause or the prepositional or indefinite phrase when the relative clause or the prepositional or indefinite phrase exists.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Lin to incorporate transmitted text to be translated in a wireless network utilizing trigger symbols to identify the portion of text to be translated as taught by Kugimiya to allow for the isolation of which text is desired as the translated portion, wherein the system will be able to recognize the tagged/triggered text by triggering proper grammar, syntax, and morphology rules for a specific language relevant to a selected portion, wherein a syntactic decision means which decides from the construction of the inputted sentence whether or not a relative clause of nonrestrictive use or a prepositional or indefinite phrase for modifying a verb accompanied by a comma located immediately before the phrase exists and the symbol

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generating means which generates in the translated sentence (Kugimiya Col. 5 lines 50-63).

Re claim 7, method of claim 1 comprising maintaining a store of portions of text and respective replacements on said communications device; and using said store to determine the replacement (Col. 4 lines 35-46).

Re claim 8, method of claim 7 wherein said portions of text and respective replacements are defined by prior translations performed using the communications device (Col. 4 lines 35-46 & Fig. 5).

**4. Claims 5, 6, 15, 16, and 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin; Carol et al. US 6999916 B2 (hereinafter Lin) in view of Kugimiya; Shuzo et al. US 5023786 A (hereinafter Kugimiya) further in view of Abir, Eli US 20040122656 A1 (hereinafter Abir).**

Re claims 5 and 15, Lin in view of Kugimiya fails to teach the method of claim 1 wherein said replacing comprises confirming the replacement (Abir [0302]).

Abir teaches a cut-off point of a chain to be translated as a translation query unit string using the dual-anchor overlap technique is user-defined (user definition of a translation query unit string in the above embodiment is a sentence). For instance, instead of a sentence, the concept can be broadened to require overlapping translations of word strings across both Source and Target Language for all contiguous word strings

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of a shorter unit (e.g., between punctuation marks) or a longer unit (e.g., a paragraph, including punctuation). Because both the beginning and the end of an overlapped unit will only have one side confirmed by overlap, user-defined criteria when building word string translations may be more stringent when accepting a first or last word string as a translation. Moreover, the aspect of the invention that identifies semantically equivalent word strings can be employed to confirm the translations of any word string (by providing additional checks of translations of Source and/or Target Language synonyms).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Lin in view of Kugimiya to incorporate replacing that comprises confirming the replacement as taught by Abir because to allow for purposes of using shorter or longer strings with the same meaning to allow for sentence length definition, wherein redundancy is accomplished if needed through multiple checks (Abir [0302]).

Re claims 6 and 16, Lin in view of Kugimiya fails to teach the method of claim 5 wherein confirming the replacement comprises obtaining at least one alternative replacement from said translation service and wherein said replacing comprises replacing using a one of the at least one alternative replacement (Abir [0302]).

Abir teaches a cut-off point of a chain to be translated as a translation query unit string using the dual-anchor overlap technique is user-defined (user definition of a translation query unit string in the above embodiment is a sentence). For instance,

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instead of a sentence, the concept can be broadened to require overlapping translations of word strings across both Source and Target Language for all contiguous word strings of a shorter unit (e.g., between punctuation marks) or a longer unit (e.g., a paragraph, including punctuation). Because both the beginning and the end of an overlapped unit will only have one side confirmed by overlap, user-defined criteria when building word string translations may be more stringent when accepting a first or last word string as a translation. Moreover, the aspect of the invention that identifies semantically equivalent word strings can be employed to confirm the translations of any word string (by providing additional checks of translations of Source and/or Target Language synonyms).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Lin in view of Kugimiya to incorporate at least one alternative replacement from said translation service and wherein said replacing comprises replacing using a one of the at least one alternative replacement as taught by Abir because to allow for purposes of using shorter or longer strings with the same meaning to allow for sentence length definition, wherein redundancy is accomplished if needed through multiple checks (Abir [0302]).

Re claims 20, 22, and 24, Lin in view of Kugimiya fails to teach the method of claim 1, wherein a response to a replacement translated portion of text comprises any of:

an 'accept translation' whereby said replacement translated portion of text is used to replace a corresponding original portion of the text based communication (Abir [0343]);

a 'reject translation' whereby an original portion of the text based communication corresponding to said replacement translated portion is retained instead of replacing it with said replacement translated portion of text ([0321]); or

a 'reject and ask for more' whereby a further request for translation of an original portion of text of the text based communication is formulated and sent to the translation service means to obtain one or more further replacement translated portions of text, the method further comprising providing a further prompt to receive a response to said one or more further replacement translated portions of text ([0343]).

Abir teaches the system, through the process, will ultimately not accept a return in the second (Target) language that does not have a naturally fitting connection, i.e., right and left overlaps with the contiguous language segments, with the exception of first and last segments, as described above. Had any Hebrew language return not had an exact overlap with a contiguous Hebrew word string association, it would have been rejected and replaced with the highest ranking Hebrew word string association for that English word string that overlaps with the contiguous Hebrew word strings, or alternative overlapping English word strings (shorter or longer) can be retrieved from the database with their Hebrew translations and tested for exact overlaps in Hebrew.

Abir teaches that word strings are overlapped completely on both left and right sides (except for first and last word strings which only have some additional

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confirmation through one-sided overlap) the translation candidates for them will not be accepted if incorrect (or correct but for a different surrounding context). The first word string on the left should be independently confirmed by one of the association methods of the present invention (or manually) as an accurate translation (at least on the un-overlapped left side of the word string) and the last word string at the end of the sentence should be independently confirmed as an accurate translation (at least on the un-overlapped right side). In the above example, either both word strings "the best time of the" and "jump in the pool" should be confirmed independently as accurate translations or at least their left and right sides, respectively. These confirmed translations give accurate end points to anchor the chain of overlapping word string translation candidates.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Lin in view of Kugimiya to incorporate accepting or rejecting a translation and replacing the translating with alternative possibilities as taught by Abir for the purposes of using shorter or longer strings with the same meaning to allow for sentence length definition, wherein a more accurate choice of replacement will be selected relative to automatic system selection with a manual user confirmation of the replacement (i.e. not necessarily the *best* grammatical choice but best according to a user's preference) to allow for purposes of using shorter or longer strings with the same meaning to allow for sentence length definition, wherein redundancy is accomplished if needed through multiple checks (Abir [0302]).

Re claims 21, 23, and 25, Lin in view of Kugimiya fails to teach the method of claim 20, wherein the further prompt enables a selection of one of said one or more further replacement translated portions of text to replace a corresponding original portion of the text based communication or to reject all of said one or more further replacement translated portions of text whereby said corresponding original portion of text is retained ([0343]).

Abir teaches the system, through the process, will ultimately not accept a return in the second (Target) language that does not have a naturally fitting connection, i.e., right and left overlaps with the contiguous language segments, with the exception of first and last segments, as described above. Had any Hebrew language return not had an exact overlap with a contiguous Hebrew word string association, it would have been rejected and replaced with the highest ranking Hebrew word string association for that English word string that overlaps with the contiguous Hebrew word strings, or alternative overlapping English word strings (shorter or longer) can be retrieved from the database with their Hebrew translations and tested for exact overlaps in Hebrew.

Abir teaches that word strings are overlapped completely on both left and right sides (except for first and last word strings which only have some additional confirmation through one-sided overlap) the translation candidates for them will not be accepted if incorrect (or correct but for a different surrounding context). The first word string on the left should be independently confirmed by one of the association methods of the present invention (or manually) as an accurate translation (at least on the un-overlapped left side of the word string) and the last word string at the end of the

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sentence should be independently confirmed as an accurate translation (at least on the un-overlapped right side). In the above example, either both word strings "the best time of the" and "jump in the pool" should be confirmed independently as accurate translations or at least their left and right sides, respectively. These confirmed translations give accurate end points to anchor the chain of overlapping word string translation candidates.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Lin in view of Kugimiya to incorporate a prompt that enables a selection of one of said one or more further replacement translated portions of text to replace a corresponding original portion of the text based communication or to reject all of said one or more further replacement translated portions of text whereby said corresponding original portion of text is retained as taught by Abir because to allow for the purposes of using shorter or longer strings with the same meaning to allow for sentence length definition, wherein a more accurate choice of replacement will be selected relative to automatic system selection with a manual user confirmation of the replacement (i.e. not necessarily the *best* grammatical choice but best according to a user's preference), and for purposes of using shorter or longer strings with the same meaning to allow for sentence length definition, wherein redundancy is accomplished if needed through multiple checks (Abir [0302]).

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Colucci whose telephone number is (571)-270-1847. The examiner can normally be reached on 9:30 am - 6:00 pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571)-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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